



## Urban morbidity in summer: Ambulance dispatch data, periodicity and weather

---

**Author(s):** Petralli M, Morabito M, Cecchi L, Crisci A, Orlandini S  
**Year:** 2012  
**Journal:** Central European Journal of Medicine. 7 (6): 775-782

---

### Abstract:

Over recent years the impact of weather on human health has become more severe, especially for people living in urban areas. Even though many studies have analysed the impact of weather on human mortality, few have quantified the impact of heat on morbidity, including ambulance response calls. In this study, 13,354 calls collected in the city of Florence (Italy) during summer were analyzed by month, day of the week, hour, and time slot of the day. An objective air mass classification was used to classify days and time slots with similar weather characteristics and a multiple variable analysis was applied to evaluate the relationship between emergency calls and weather. A positive trend was observed in the morning and a negative one during the night for all emergency calls, but only for food poisoning and alcoholic diseases. Calls for cardiovascular events increased in the morning and on hot days. Calls for psychiatric disorders rose significantly with temperature during the afternoon. The total number of calls and those for alcoholic diseases rose during the hottest nights. Our results, which show a clear relationship between ambulance response calls, periodicity, and weather, could contribute to an understanding the impact of weather on morbidity.

**Source:** <http://dx.doi.org/10.2478/s11536-012-0056-2>

### Resource Description

#### Exposure :

weather or climate related pathway by which climate change affects health

Meteorological Factors, Temperature

**Temperature:** Fluctuations

#### Geographic Feature:

resource focuses on specific type of geography

Urban

#### Geographic Location:

resource focuses on specific location

Non-United States

**Non-United States:** Europe

# Climate Change and Human Health Literature Portal

**European Region/Country:** European Country

**Other European Country :** Italy

**Health Impact:** ☒

specification of health effect or disease related to climate change exposure

Cardiovascular Effect, Infectious Disease, Injury, Mental Health/Stress, Morbidity/Mortality, Neurological Effect, Respiratory Effect, Other Health Impact

**Infectious Disease:** Foodborne/Waterborne Disease

**Foodborne/Waterborne Disease (other):** food poisoning

**Mental Health Effect/Stress:** Other Mental Disorder

**Other Health Impact:** alcoholic disease;heat related illness

**Resource Type:** ☒

format or standard characteristic of resource

Research Article

**Timescale:** ☒

time period studied

Time Scale Unspecified